

App. Serial No.: 10/634,421
Atty. Docket No.: 0003-033P1

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A pump for moving a product, comprising:
a separating apparatus;
an air pump for providing a vacuum to the separating apparatus; [[and]]
a pressure valve apparatus for allowing the product to be removed from the separating apparatus; and
a blower for blowing the product out of the pump.
2. (original) The pump of claim 1, wherein:
the separating apparatus is a cyclonic separator.
3. (canceled)
4. (currently amended) The pump of ~~claim 3~~ claim 1, wherein:
~~the forced air source is an air pump; and~~
~~the vacuum source~~ blower is an air pump.
5. (currently amended) The pump of ~~claim 3~~ claim 1, wherein:
~~the forced air source and the vacuum source~~ the air pump and the blower are a single the
same air pump.
6. (currently amended) The pump of ~~claim 3~~ claim 1, and further including:
a cooling apparatus for cooling air exiting the ~~forced air source~~ blower.
7. (currently amended) The pump of claim 1, and further including:
a demister for removing moisture from air entering the ~~vacuum source~~ air pump.
8. (original) The pump of claim 1, wherein:
the pressure valve apparatus is a rotary dump valve.

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9. (currently amended) The pump of claim 1, wherein:
the pump is adapted to pump a wine product capable of pumping a liquid-solid mixture.
10. (currently amended) The pump of ~~claim 1~~ claim 9, wherein:
the ~~pump is adapted to pump~~ the liquid-solid mixture is a wine product must.
11. (currently amended) The pump of ~~claim 1~~ claim 10, wherein:
the ~~pump is adapted to pump~~ the wine product is wine must pomace.
12. (currently amended) A wine must pump for pumping a wet wine product, comprising:
a separator for separating the wet wine product from air;
an air pump providing a vacuum source for drawing sufficient to draw the wet wine product into the separator;
a valve apparatus for allowing the wet wine product to fall out of the separator into a depository; and
a blower providing [[a]] compressed air source for blowing sufficient to blow the wet wine product out of the wine must pump.
13. (currently amended) The wine must pump of claim 12, wherein:
the ~~vacuum source and the compressed air source are~~ blower is an air pump.
14. (currently amended) The wine must pump of claim 12, wherein:
the ~~vacuum source~~ air pump and the ~~compressed air source~~ blower are an air pump;
wherein the same air pump; and
at least some air drawn out of the separator is used to blow the wine product out of the wine must pump.

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15. (currently amended) The wine must pump of claim 12, wherein:
the wine product drops out of the depository into a mixing valve; and
air from the ~~compressed air source~~ blower blows the wine product out of the mixing valve.
16. (currently amended) The wine must pump of claim 12, and further including:
a heat exchange apparatus for removing heat from compressed air exiting the ~~compressed air source~~ blower.
17. (original) The wine must pump of claim 12, and further including:
a demisting apparatus for removing moisture from air exiting the separator.
18. (original) The wine must pump of claim 12, wherein:
the separator is a cyclonic separator.
19. (original) The wine must pump of claim 12, and further including:
an in line silencer for reducing noise caused by air exiting the separator.
20. (currently amended) The wine must pump of claim 12, and further including:
a silencer for reducing noise from the ~~compressed air source~~ blower.
21. (currently amended) The wine must pump of claim 20, wherein:
the silencer is connected such that air entering the ~~compressed air source~~ blower goes through the silencer.
22. (currently amended) The wine must pump of claim 20, wherein:
the silencer is connected such that air exiting the ~~compressed air source~~ blower goes through the silencer.

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23. (original) A method for moving a wine product, comprising:
applying a vacuum to a separator to draw the wine product into the separator;
removing the wine product from the separator into a depository; and
blowing the wine product from the depository.
24. (original) The method of claim 23, wherein:
the vacuum is created by an air pump; and
air exiting the air pump is used to blow the wine product from the depository.
25. (original) The method of claim 24, wherein:
the air is cooled.
26. (original) The method of claim 23, wherein:
the wine product falls from the depository into a mixing valve;
the wine product is mixed with compressed air in the mixing valve; and
the wine product is forced out of the mixing valve by the force of the compressed air.
27. (original) The method of claim 23, wherein:
the wine product is a crushed grape product.
28. (original) The method of claim 23, wherein:
the wine product includes a must.
29. (original) The method of claim 23, wherein:
the wine product includes a pomace.
30. (original) A method for moving a product, comprising:
drawing the product into a chamber via vacuum;
drawing gasses from said chamber via vacuum to separate said gasses from said product;
and
pushing the product from said chamber via compressed gasses.

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31. (original) A pump comprising:
means for drawing a product and gas mixture into a chamber;
means for separating the product from the gas; and
means for removing the product from the chamber.
32. (original) A pump comprising:
a chamber;
an inlet port coupled to said chamber to facilitate the flow of product into said chamber;
an outlet port for discharging said product from said pump;
a vacuum port coupled to said chamber;
a vacuum source coupled to said vacuum port to provide a negative pressure in said chamber, whereby said product can be drawn into said chamber through said inlet port;
a pressurized gas source; and
a mixing valve coupled to said chamber, said outlet port, and said pressurized gas source, whereby said product can be pushed out said outlet port by said pressurized gas.
33. (new) A pump according to claim 1, further including an inlet valve disposed in the separating apparatus near the pressure valve apparatus, whereby gas entering the separating apparatus via the inlet valve agitates the product to prevent blockage of the pressure valve.
34. (new) A pump according to claim 12, further including an inlet valve disposed in the separator near the valve apparatus, whereby gas entering the separator via the inlet valve agitates the product to prevent blockage of the valve apparatus.
35. (new) A method according to Claim 23, further comprising agitating the wine product in the separator to prevent clogging during the step of removing the wine product from the separator.